

Final script from "Adult Immunization Update" satellite broadcast, June 26, 2003.

Meningococcal segment.

The last vaccine we are going to discuss is meningococcal vaccine. We mention it briefly since there are a few indications for its use noted on the Adult Immunization Schedule.

Meningococcal disease is a serious, potentially life threatening infection, caused by *Neisseria meningitidis*. Each year 2,000 to 3,000 cases of meningococcal disease occur in the U.S., which translates to a rate of about one case per 100,000 population. The highest age specific disease rates are among infants and young children, but, in the past few years, the rate of meningococcal disease among adolescents and young adults 15 to 24 years of age has increased. Most of the meningococcal disease worldwide is caused by five serogroups of *Neisseria meningitidis*: serogroups A, B, C, Y, and W-135. Most disease, about 80%, in the U.S. is caused by serogroups B, C and Y.

Approximately 10% to 15% of children and young adults who get the disease will die. Among those infected who live, another 10% lose their arms or legs, or have neurologic sequelae.

Anyone can get meningococcal disease, but it's most common in infants less than one year of age, and in people with certain medical conditions. College freshmen, particularly those who live in dormitories, are at a slightly higher risk of meningococcal disease than are other people in their age group. This is probably related to transmission being facilitated in a crowded dormitory-style environment. The infection is transmitted from person to person through close contact with respiratory or throat secretions. Transmission can occur through coughing, kissing, or sharing a glass. People who live in close quarters with an infected person are at greater risk.

Meningococcal vaccine, Menomune, is manufactured by Aventis Pasteur. It is an inactivated quadrivalent polysaccharide vaccine. Meningococcal vaccine protects against four serogroups: A, C, Y, and W-135. There is currently no licensed vaccine that protects against serogroup B, which accounts for about a third of U.S. isolates. The

recommended vaccination schedule is one dose with revaccination in five years if the risk remains high.

Meningococcal vaccine is recommended for persons at increased risk of exposure to meningococcus or at increased risk of meningococcal invasive disease. These groups include military personnel; persons who might be affected during an outbreak of certain serotypes, especially serotype C; some international travelers, in particular those traveling to sub-Saharan Africa, or attending the Hajj in Saudi Arabia; and people with functional or anatomic asplenia. The vaccine is recommended for people with a terminal complement component deficiency, a condition which increases the risk of invasive meningococcal disease. Finally, the vaccine may be administered to certain laboratory workers who are routinely exposed to the meningococcal bacteria.

The vaccine is NOT recommended routinely for all college students. However, ACIP does recommend that health care providers inform college freshmen, especially those who live in dormitories, about meningococcal disease and benefits of vaccination. If college freshmen want to reduce the risk for meningococcal disease, health care providers should either administer the vaccine or direct the student to a site where the vaccine is available.

More than half of those who are vaccinated with meningococcal vaccine experience no side effects. Among those who do have a reaction, most have only a mild reaction. Local reactions, like pain and redness at the injection site, are reported by up to 40% of those vaccinated. Approximately 2% of those vaccinated experience a fever that lasts one to two days. Serious reactions, such as an allergic reaction, are not common.

People should NOT be vaccinated with meningococcal vaccine if they have ever had a serious allergic reaction to a vaccine component or following a prior dose of vaccine. Persons with moderate or severe acute illness should not be vaccinated until the illness has improved. Since meningococcal vaccine is an inactivated vaccine, it can be administered to pregnant women, when indicated.

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